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ABSTRACT

This guide to using computers with infants and toddlers was developed by the "Let's Play! Project," a 3-year federally supported project that worked to promote play in infants and toddlers with disabilities through the use of assistive technology. Following an introductory section on getting ready to use the computer with a young child, the first section focuses on software for the emerging play behavior of making things happen. Topics include selecting software, software features, what the parent should do, controlling software, and software for exploring causality, using a single switch. A table offers suggestions for single switch interfaces and/or mouse click. The next section focuses on software for exploring choices including controlling software and adjusting mouse pointers. A table describes suggested trackballs and touch screens for young children. The final section is on software for purposeful choice making and discusses controlling software and examples of alternate computer input. A table lists some suggested devices for early choice making. The final section is a directory of software for early intervention and is coded by its use in three types of play: exploratory choices, choice making, and purposeful choices. (DB)

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EC 308150

Computer Play With Young Children

Let's Play Project
University at Buffalo
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DOE Grant #H024B50051

COMPUTER PLAY WITH YOUNG CHILDREN
BIRTH THROUGH TWO

The Let's Play! Project is a model demonstration grant funded by the U.S. Department of Education, Office of Special Education Programs; grant #H024B50051. Funding began June 1, 1995 and continues through May, 2000. We began to replicate the model across New York State in 1996. Opinions, materials and references to commercial products do not necessarily reflect the opinions or policy positions of the United States Department of Education, and no official endorsement by the department should be inferred.

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COMPUTER PLAY WITH YOUNG CHILDREN

Computers and babies? Today's software programs are being designed for babies as young as 9 months old - this may not be as far-fetched as it seems. As computers are becoming more common in homes, software programs offer ways for even the youngest child to participate in this new family activity. As fun and learning come when parents and babies play together, these programs are often referred to as "lapware" - intended to be used by children with their parents. Programs include subject matter that appeals to the young child's natural curiosity as well as easy controls that allow the child to make changes on the screen. Well-designed software responds to what the baby normally does; random "banging" on the keyboard or mouse "clicking" prompts a response. A parent's role is critical in interacting with their child with this new "toy". As with any engaging activity, there doesn't need to be a "goal" when playing. Simply enjoying the computer responses together can be fun!

Although software programs are designed for all children, babies with disabilities may find additional benefits. For them, computer activities can simulate traditional play sequences that are easier to control. For example, a child who likes to watch block towers being built and then knocked down, but is unable to experience this himself due to physical limitations, can do it "all by himself" with the press of a single key, mouse or switch.

With so many choices of what to select for beginning computer play, this booklet offers suggestions on what to look for in software as well as ideas to ensure that young children have *fun* with computers. Making something happen, then choosing when, where and what will happen are adventures the young child experiences as s/he explores this new, interactive environment. The following information is designed to guide parents and the professionals who use computers with children with disabilities, in ways that will make computer play an engaging and interactive experience!

GETTING READY

Using the computer with a young child on your lap may require some adjustments to maximize comfort and interactions.

- What is the best position for your child to see what's happening on the computer screen? Try to have your child's eyes even with the middle or top half of the screen, about 10-15 inches away from her face. A monitor can sit right on a table or desk; it doesn't have to be on top of the computer- moving it should bring it down to a better height.

- To make the size of the active area as large as possible, go to the Display option in the Windows Settings Control Panel, click on Settings and set the display to 640 X 480 pixels with the number of colors at 256.

- If the child drools or puts his fingers in his mouth, cover the keyboard with plastic wrap or with a vinyl cover available at computer stores.

- Test out the volume of the software program. Know where the computer's volume control is. Programs may need to be individually adjusted.

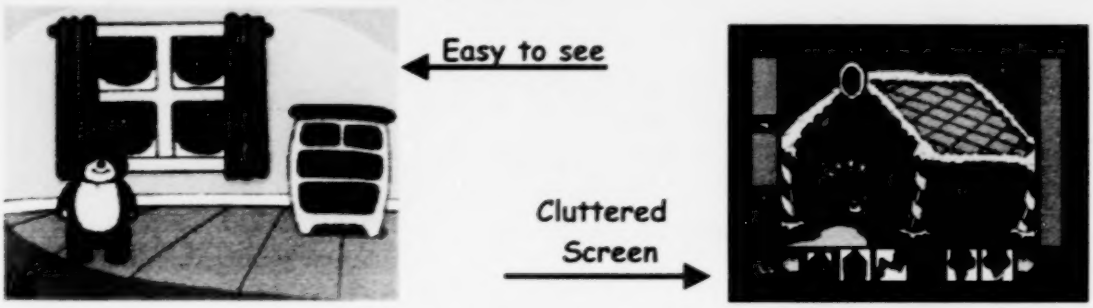
- Know how the program is activated. Examine the software to find what your child must do to control the program - any key on the keyboard? A specific key(s)? A mouse click? Point and click? Hold and drag?

EMERGING PLAY: MAKING THINGS HAPPEN

Selecting Software

Young children enjoy programs incorporating familiar subject matter (families, homes, food, toys, etc), with realistic pictures, sounds and animations that are easy to recognize. "Clean", non-busy graphics make changes easier to see; simple backgrounds are best. As these earliest software programs encourage young children to begin to discover the computer environment, the child's sensory preferences should guide the selection of programs. Some favorites may include musical and realistic sounds, colorful and simple drawings that represent real objects, and animations that relate to the pictures on the screen. In fact, consider that some children may relate better to actual photos on the computer screen, as they are more "real" to them. As with any

play activity, the complexity of the software should grow with the child - from simple to one with increasing detail.



Software Features

Review software before you introduce it to your child. Although box descriptions offer some information, most is there to promote the product! Some stores have review stations so you can check out the content of the software before you buy it. Ask what the store's return policy is; some have a 14-day review option. Libraries often provide opportunities to review and borrow software programs. When looking at software, notice how the information on the screen is presented, how the child makes it "work", what happens when the child presses a key and if the program features will appeal to the child.

- **Sound:** Does the program make sound? If so, is the sound potentially calming, or louder and potentially arousing? Is it realistic? Musical? How long after a key is pressed does the sound continue? Does your child have time to look up at the screen to find the source of the sound?

- **Visual:** Does the program have attractive features? If the visual features are due to bright color and/or contrast, are they simple or complex? Are the objects on the screen easy to recognize? Is the background cluttered? Are the objects linked to appropriate sound?

- **Control:** What is necessary to make the software work? Number of keys needed- more than one? Is a sequence of key presses required? If mouse movement is required, what type?: point, click, drag? What happens? How much cueing is provided? Does the software "wait" for the child to initiate? Observe the changes on the screen; how fast is the reaction to the key press: immediate or delayed?

Children enjoy computer activities, especially when they are in "the driver's seat". To emphasize this control, something should immediately happen on the screen each time the child presses a key or clicks. This concept of control is reinforced when the entire screen (or an area on the screen) changes when a single key (or mouse click) is pressed. This helps to hold their attention and to link their key press with the reaction on the screen. Look for various software programs that include one or more of the following reactions to a single key press:

- the entire screen changes; a new sound is heard; an object moves across the screen. Sometimes the visual, sound and animation components work together to reinforce the key press, giving the child a "big bang for his buck"!
- some coloring book programs color one area at a time when a key/switch is pressed. Pictures often animate when they are "completed". This type of activity is great for "taking turns" with the child.

- an object or scene is built click by click

SwitchIt! Scenes (IntelliTools, Inc.): each time a child presses a key, new objects are added to the scene.

What To Do

Talk with your child about what is on the screen and what happens when the key/mouse is pressed. Your enthusiasm will increase your child's interest. Allow time to respond; some children need a longer duration to watch and understand.

- Point out objects and talk about what is happening on the screen. Children enjoy using new words and repeating them.

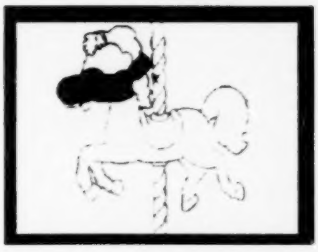
- Try incorporating real objects or small props of real objects with computer activities. They will help make the interactions more real for the child. The Fisher Price programs use the same "Little People" characters that are found with their popular toys.

- Children enjoy familiarity and repetition, while at the same time they like a response to be without delay. Introduce and use a single program until the child can anticipate what will happen next. As with any new toy or game, children are more interested as they become more familiar.

☺ *It is the interaction between you and the child that is the basis for learning.*

- As your child becomes more accustomed to pressing a single key to control the screen response, look for programs that define "when to press". These opportunities to practice "timing" begin by watching and then pressing a key at a particular time to make something change. An example is the *Animal Parade* (FP Toddler) where an animal moves left to right across the screen; to make it "talk", the child must press the switch while it is still on the screen.

- Several programs address the limited coordination of young children and require just the movement of the mouse- not a "point and click". For example, a hidden picture can be uncovered by moving the mouse back and forth across the screen in any direction. Trackballs can be helpful here as their design makes the relationship between the pointer and the ball more obvious.



Reader Rabbit: Toddler (The Learning Company.): move the crayon over the picture by moving the mouse and colors appear! No need to "click!"

Controlling Software

A child does not need to know how to use a mouse or a keyboard to interact with software programs. Often holding the mouse in both hands to click works best. "Banging" on the keyboard is a natural way for kids to find out more about the relationship between keys and screen changes. Look for programs where children can press any key, or click the mouse to make something happen. Learning comes in knowing WHEN to press or click and then eventually knowing WHAT to do to make something happen.

Software for Exploring Causality

In our experience in observing young children playing with computers, we have found that simplified input control (What the Child Does) and simplified output (What Happens) is the best place to start when introducing the child to software. Once started, consider changing either input **or** output for variety. The following list of actions is not meant to be sequential. Rather they act to promote the child's emerging interest and control of the software world.

Software for Exploring Causality

What Child Does	What Happens	Software Examples
Presses a single key or "clicks" a mouse	Entire screen changes	BABY-WOW (Bow-Wow House) KeyWack (Pub. Domain)
	Picture/sound on screen changes to a new one	Creature Antics (Laureate)
	Random areas of the screen change	BabyToons (Shareware) FP Toddler (Davidson)
	A scene or object is "built" press by press	Build-A-Scene (RJ Cooper) SwitchIt!: Scenes (IntelliTools)
	A page is colored part by part	My Paint Program (SoftTouch/kidTECH)
	An object moves step by step in one direction	Step in Time (DJ Inc.) Switch it See it (UCLA)
	A single object within a screen changes	FP Play House (Balloons game)
Presses a key at a certain time; WHEN	Specific, "cued" areas of the screen change;	BabyToons (shareware)
	Object appears for a certain length of time; then changes/animates/ part to whole	FP Toddler (Animal Parade)
	A story advances screen by screen	StoryTime I & II (Creative Communicating)
	A click will change an object to its opposite; explore concepts of up/down, big/little	Eensy & Friends (DJDE)
Move mouse around screen	Objects appear when pointer is over them; disappear when not there	Reader Rabbit Toddler My First Software
	Moving the mouse around uncovers a surprise.	Reader Rabbit Toddler

Using A Single Switch

Many programs designed for young users require the child to press a single key or to "click" the mouse to make something happen on the screen. Some children are physically or sensorily limited in their ability to do this. For others, limiting their control to a single key can help to establish a more direct connection between what they do and what happens on the screen. In both cases, the substitution of a **single switch** for a key press or a mouse click, can allow the child to focus on making things happen on the screen and not on which key to hit.

Switches often look like large buttons, giving the child an obvious target to hit. There are many switches available (over 700!) that are designed to respond to almost any controlled movement; by a foot, arm, or head with a swipe, grab or blink. A special computer interface is necessary to connect a switch to the computer. **Any switch can be used with a computer interface.** Consult with the child's therapist to select a switch for a child.

Switch Considerations

- Can the child independently activate the switch? Is it *easy* for the child? Have you considered the child's most controlled movement?
- How much pressure must s/he apply? Does the child need feedback (movement, sound) when the switch is activated to better make the connection?

Big Red (Ablenet)
The 5" target makes it easy to see & use.

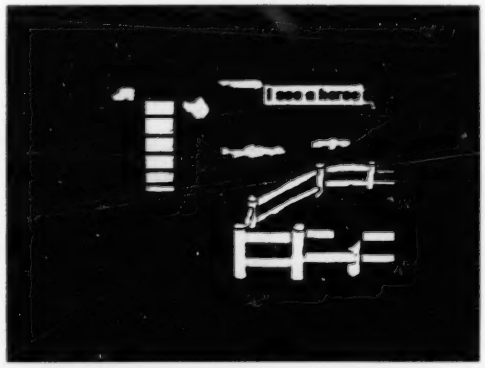
- Is the switch an appropriate shape and size for this activity? Is it distracting? Does it fit the computer area?
- Where should the switch be positioned for best interaction? Does the child have primitive reflexes that will limit their ability to reach out and view the monitor at the same time?
- Should the switch be stabilized with Velcro to make it easier to use? Consider attaching it to the edge of the monitor to directly connect its relationship to changes on the screen.

Katie is using a smaller 2 ½" Buddy Button (TASH)

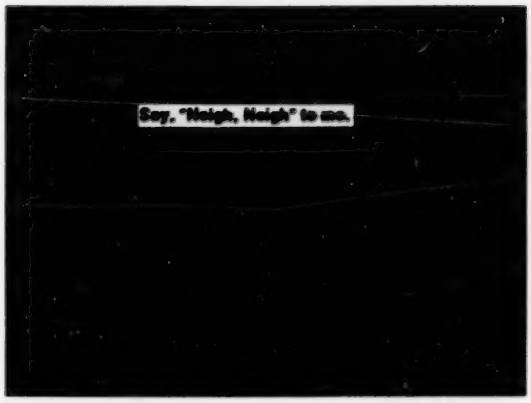
Some software programs are designed specifically for young switch-users! Simplified graphics are often matched with real sounds and music to interest the child and to motivate her to "push it again"! When the switch is activated, something always happens. Some programs react by staying on as long as the switch is held down, while others will not advance until the switch is released and pressed again. These are deliberate features to promote the child's understanding that s/he is in control. The following illustrations are of programs within the StoryTime SongBook 2 (Creative Communicating) software. Here, a story is told page by page as the child's switch activation advances to the next page. The software includes colorful graphics, animation, highlighted text, enlarged text, music, and digitized singing. It's a favorite with your children!

Screen 1

Screen 2

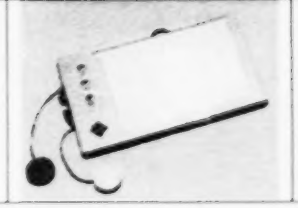


Screen 3



Any switch can be connected to a computer with a variety of switch interfaces. To use a switch with exploratory programs that require a single key press or mouse click, see the following *Table 1: Suggestions for Single Switch Interfaces.*

TABLE *1:* SUGGESTIONS FOR SINGLE SWITCH INTERFACES AND/OR MOUSE CLICK.

DEVICE		KEY OR CLICK	COMPUTER	DESCRIPTION
Low Tech Ideas		Any key or mouse button	Any	Put colorful and/or textured stickers on the left mouse button or keyboard key to highlight.
Switch Interface Don Johnston Inc.		Any key or Click	Mac: $135 DOS/Win: $99	This interface allows up to 5 switches to be used as different keys/clicks.
Baby Button R.J. Cooper		Click only	Mac or WIN: $49	Simply plug this switch/interface into the computer and "click". Additional switch not necessary.
Switch Adapted Mouse (SAM) R.J. Cooper		Any key or Click	Mac: $120 DOS/WIN: $120	SAM can be purchased as an adapted trackball or joystick. Plug in any switch and "click".
IntelliKeys IntelliTools, Inc.		Any key or Click	Mac, Apple, DOS, WIN: $365	This versatile keyboard can be used as a switch interface for 1 or 2 switches with the set-up overlay.

Software for Exploring Choices

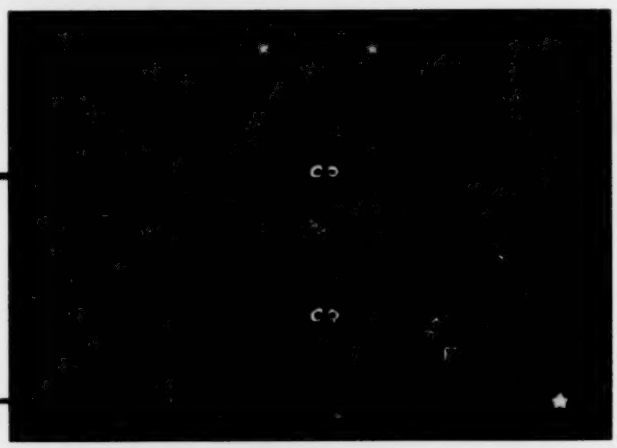
Software programs offer many opportunities for choice making. Children begin making choices between two or more objects or actions on the screen. The software itself will determine whether the child makes a choice between different keys or where to point with the mouse and click. Making choices provides great opportunities for turn taking.

- Look for software where no "right" answers are required; where opportunities to explore specific areas on the screen are provided. The child is learning **WHERE** to press to get a reaction.

- Built-in software guidance should cue the child as to what to do or when to do it. Parents still need to participate enthusiastically in the interactions and reinforce the child's responses.

- Start with two to three choices
  - 2 screen choices or "hot spots" on the screen or,
  - 2 keys or movements for input control

Reader Rabbit: Toddler
With the mouse, move the flashlight to a pair of eyes to find an animal.

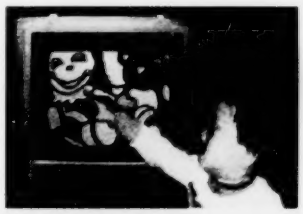


- Storybook software programs provide an active setting where the child gets to "play" with the software by selecting (pointing and clicking) objects on the screen. Ask the child to make a selection, either by pointing to it or by telling you. Guide the mouse pointer to that area, and let your child "click" the mouse. Each object, when clicked, responds with animation and sound.

- Gradually increase the number of choices either on the screen or keyboard. Children enjoy pressing letter keys that result in animated pictures of objects relating to those letter or number keys.

Controlling Software

A child now must activate a specific area of the screen in order to make a choice. A device such as a Touch Screen provides the most direct selection method as a child simply touches what s/he wants on the screen and the computer interprets the touch as a selection. A Touch Screen can be used with any software program. As the majority of commercial programs are designed for mouse use a touch screen acts as a mouse.



Magic Touch (Key Tec)

Easy Ball (Microsoft)

Another alternative to the mouse is a **trackball**, which is easier to manage than a mouse for young children in controlling the pointer on the screen. Look for track balls that offer software settings for adjusting the sensitivity and double-click speed for beginning users and more experienced children.

Allison and her mother are using the large Easy Ball to move the pointer on the screen.

Adjusting Mouse Pointers

Children often have difficulty noticing and controlling the pointer on the screen. This is very abstract for a young child. Screen pointers can be made larger in several ways:

- In the Windows Control Panel, the regular pointer can be adjusted by changing its size, color, shape or use of a "tail".

Pointer with tail

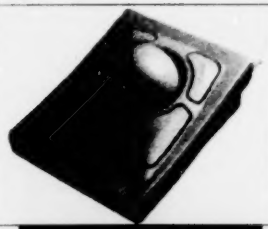
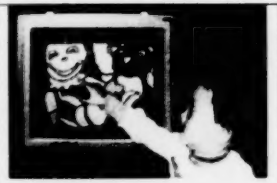
- Check to see if your trackball or mouse came with special software drivers to adjust the size of the pointer. EasyBall's (Microsoft) software includes "PointerLand" where a child can turn the

pointer into a heart, ant, etc., making it easier to follow on the screen.

- For Macintosh computers, some options can be changed within the Control Panel (i.e. speed, tails) or the purchase of *Biggy* (R.J. Cooper) can be used to adjust the size and shape of the pointer.

To use a trackball or touch screen with programs that require mouse movement, see the following *Table 2: Suggested Trackballs and Touch Screens for Young Children.*

TABLE 2: SUGGESTED TRACKBALLS AND TOUCH SCREENS FOR YOUNG CHILDREN

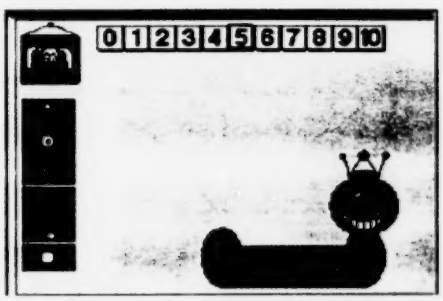
DEVICE		MOUSE BUTTONS	COMPUTER	DESCRIPTION
Easy Ball Microsoft		A single large button. Software controls speed of pointer.	DOS/WIN: $44.95	This 4 inch "lapball" moves with some resistance so that the child easily connects its movement with the pointer. With included software, child can choose a "pointer" to use (airplane, rocket, star, baby chick or ant).
Trackball Kensington Technology Group		MouseWorks software allows four buttons to be programmable.	DOS/WIN, MAC $60	
Touch Window Edmark Corp.			Mac, WIN, DOS, Apple $335	This portable, lightweight panel attaches to a 12-15" or 17" monitor with velcro. It acts as a mouse when children naturally touch the screen
Magic Touch KeyTec		Right mouse button support.	Mac, Win $350	This 17" touch screen can be used on any monitor with any software.

Software for Purposeful Choice Making

As a child becomes more adept at choice making with computer controls, new software programs offer opportunities to generalize concepts and to make functional choices. For example, a child learns that if s/he clicks on the red color palette, a certain area on the screen will be colored "red". Facilitating discovery while offering choices that result in a tangible product promotes a feeling of accomplishment without requiring a "correct" result. Children begin to use the computer as a tool to control **WHAT** is happening.

- Edmark's Early Math and Literacy programs offer a "discover" mode where opportunities to use size and number concepts are provided. No correct answers are required; interactions result in consistent and amusing responses.

  The "Build a Bug" program in *Millie's Math House* (Edmark), facilitates the combination of sets of numbers and body parts to build a bug to the child's specifications. With the numbers in a line, concepts of more or fewer become apparent while creating different "bugs". Additional opportunities to record a bug message and to print out the creation are also provided, enhancing a child's experience.



- Construction programs offer a child the opportunity to create a new design or object and to print it out or save it. These include playdough creations, block building, mask making, etc. They simulate real life experiences and provide children who have difficulty manipulating with the opportunity to experience these playful interactions.

- Programs that provide the means to draw with brushes and crayons in a variety of colors and to paste "stickers" on the screen, allow opportunities for creativity. With these programs all children can create "refrigerator art".

Controlling Software

Because these software programs require an emerging understanding of concepts and knowledge, they require that the child use certain tools. The child must first be able to get to the tools on the computer screen and then be able to use them. This often takes the form of "pointing and clicking" on certain objects with a mouse. Because many children cannot use the mouse accurately but are able to understand the concepts presented, adaptations are available to make the programs easier to navigate.

Scanning systems and **keyboard overlays** are two options that should be considered for increased independence in choice making and navigational success when children can't use standard methods.

- With a scanning system, a child presses a switch to indicate a choice as options are highlighted on the screen.
- When using a keyboard overlay, a child touches pictures that correspond to choices on the screen.
- Both systems can be used with one, two or more choices.

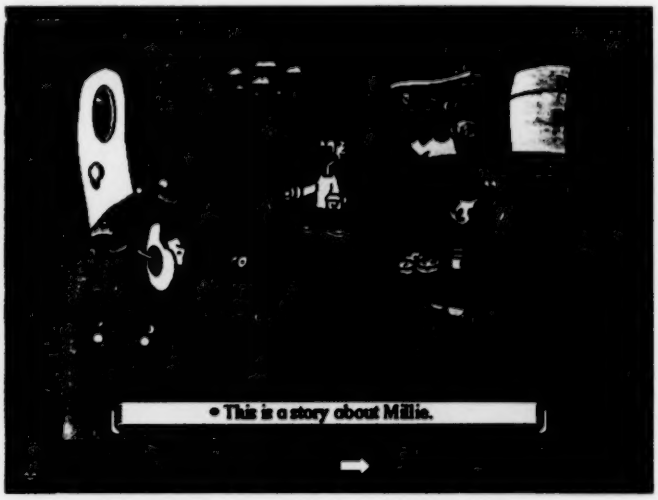
Examples of Alternate Computer Input

The following examples use the same software program, *Bailey's Book House* (Edmark), to illustrate the 1) method designed by the software program, 2) scanning adaptations for the same program and 3) overlay adaptations using screen pictures on an alternate keyboard.

The end result of any of these methods is the same: children get to create a story all by themselves that they can read over and over again.

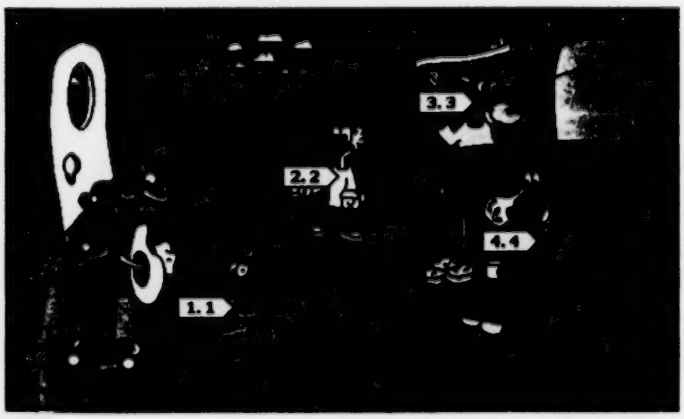
In *Bailey's Book House*, children are able to create a story by selecting from four choices on the screen. As they select a character, environment, vehicle, etc. the story changes to reflect those choices. To make a selection, the child must move the mouse pointer to the desired area and "click".

With a mouse, trackball or touch screen, a child "points and clicks" on a character to make a story.

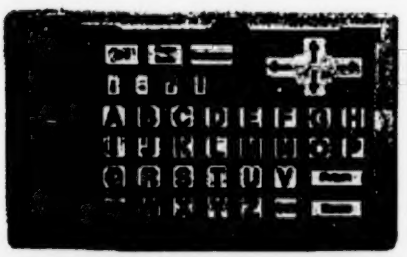


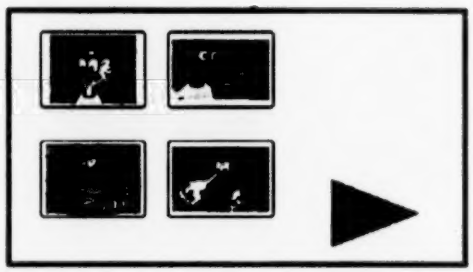
1. In the next example, the characters on the screen are each "scanned" with a moving box when a switch is pressed. A scanning program (*ClickIt!* by IntelliTools) highlights "hot spots" on the screen which, when activated, make something happen. In this example, the "hot spots" include the 4 characters on the screen. This ClickIt! program allows you to customize the number of hot spots, the speed of the scan, and whether each hot spot will say the name of the character as it is scanned. The child activates a switch to start the scan and then presses again when the choice is highlighted. This allows the software choices to be controlled with just a single switch.

A scan of 4 Hot Spots right on the screen is made with ClickIt!: (1.1 - 4.4). 1 for each character. A box moves from character to character. Press the switch to start the scan; press it again to select a character.



3. The last example shows an overlay created by combining the *ClickIt!* "hot spots" and the features of *Overlay Maker* (IntelliTools, Inc.). An overlay is created which uses pictures of the hot spots on large keys. The overlay is used with the IntelliKeys keyboard. The child presses a picture key on the overlay to choose the character s/he wants. The pointer automatically goes to that area on the screen and "clicks". This is a great option for many young children!

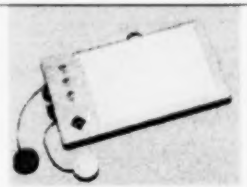
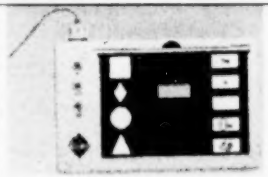




Overlay Maker (IntelliTools)
When a child presses a picture on the keyboard overlay, the pointer on the screen goes to that character and "clicks".
- These overlays must be used with the IntelliKeys keyboard.

There are several ways to create scans and overlays for commercial software programs. Refer to the following *Table 3: Suggested Devices for Early Choice Making* for input options offering "unlimited" number of choices.

TABLE 3: SUGGESTED DEVICES FOR EARLY CHOICE MAKING

DEVICE		# OF CHOICES	COMPUTER	DESCRIPTION
IntelliKeys IntelliTools, Inc.		One or two switches for choices	Mac, Apple, DOS, WIN: $365	This versatile keyboard can be used as a switch interface for 1 or 2 switches with the set-up overlay.
Overlay Maker Software IntelliTools, Inc.		Unlimited	Mac - $69.95 WIN - $99.95	The software provides a way to create overlays. Simply draw keys on the computer screen. Add letters, phrases, mouse movements. Use pictures or text to label the keys.
ClickIt! Software IntelliTools, Inc.		Unlimited	Mac, WIN $99.95	Create "hot spots" within your software which indicate the active areas where you point and click. Use for scanning or in combination with Overlay Maker.
Switch Interface Don Johnston Inc.		Up to 5 switch choices	Mac: $135 DOS/Win: $99	This interface allows up to 5 switches to be used as different keys/clicks.

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Discovery Switch Don Johnston Inc.		Unlimited	Mac, Win: $399	Discover:Switch displays pictures in a scanning array for choice making.
Discovery Board Don Johnston Inc.		Unlimited	Mac, Win: $499	With Discover:Board make keys bigger or smaller, change colors, and add pictures.
Symbi-Key Ablenet, Inc.		9 switch jacks and 3 levels	DOS,WIN $199.00	From 1 to nine switches can be used with any program. This computer interface provides for up to 27 switch "set-ups". For "click", Mouse Keys within the Accessibility control panel, must be turned on. Num Pad 5 = click!

SOFTWARE FOR EARLY INTERVENTION

- **Exploratory** • **Choice Making** • **Purposeful Choices**

SPECIAL SOFTWARE RESOURCES

Creative Communicating
P.O. Box 3358
Park City, UT 84060
(435- 645-7737

This software can be used with IntelliKeys, Single Switch, Auditory Scans, and Touch Windows.

- **StoryBook Songbook 1** (Mac/Win CD)

Includes the following songs sung to familiar tunes and based on the stories. Happy, Happy Birthday, Wash, Wash!, Dirty Duds, What's for Breakfast?, and Time for School.

- **StoryBook Songbook 2** (Mac/Win CD)

Part 2 includes five songs: On the Farm, Time for Bed, Lets Make Juice, Cooking Dinner, and Going to the Toy Shop.

Don Johnston, Inc.
1000 North Rand Rd., Bldg. 115
PO Box 639
Wauconda, IL 60084
(800) 999- 4660

- **CircleTime Tales Deluxe** (Mac/Win CD)

Program uses three nursery rhymes to learn beginning literacy concepts. *Includes Eensy Weensy Spider, Mary Wore Her Red Dress* and *Five Little Ducks*. Press a switch to advance the rhyme.

- **Storytime Tales** (Mac)

Use a single switch to turn the pages of these delightful stories and to have the story read to you. Includes *Forgetful's Secret, Dirty Duds* and *Bobby, Bobby, What Did You Do?* Children enjoy the repetitive lines.

- **Press to Play Series** (Mac, Win)

Three games with animals and a boy named Speedy. Level one requires only a single key/switch to see what happens. Other levels provide more directed opportunities to interact.

- **Humpty Dumpty & Friends** (Mac, Win)

Features characters from three popular children's nursery rhymes in entertaining cause and effect activities that introduce other learning concepts as well.

- **Eensy and Friends** (Mac, Win)

Features characters from CircleTime Tales in cause/effect activities using directional concepts, counting and color identification.

- **Forgetful and Friends** (Mac, Win)

Features characters from Storytime Tales in a variety of cause/effect activities.

IntelliTools
55 Leveroni Court, Ste.9
Novato, CA 94949
(800) 899-6687

Switch It! Software (Mac, Win and Mac/Win CD)

- Switch It! Pictures
- Switch It! Scenes
- Switch It! Patterns
- Switch It! Opposites
- Switch It! Arcade

Kid/TECH/SoftTouch

3204 Perry Pl.
Bakersfield, CA 93306
(805) 873-8744

- **Monkeys Jumping on the Bed** (kidTECH/SoftTouch; Mac orWin)

Pick the "just for fun" option (cause and effect) for maximum toddler control. Pick the activity and the number of choices to be displayed on the screen.

- **Old MacDonald's Farm** (SoftTouch/kidTECH; Mac/Win CD)

Choose a favorite farm animal interact in three barnyard scenes while the classic song is sung. A great program for playing with animal names and sounds.

- **Make it Go** (SoftTouch/kidTECH; Mac or Win)

Play Peek-a-Boo with a bear, find the dog or blow some bubbles in the air. The variety of songs and graphics keep the interest of young children.

- **Best of kidTECH** (SoftTouch/kidTECH; Mac or Win)

A variety of interactive animated songs, including: *Five Green and Speckled Frogs, I'm Bringing Home a Baby Bumble Bee*, etc.

- **Five Little Ducks** (SoftTouch/kidTECH; Mac or Win)

Children can interact with this favorite animated song of *Five Little Ducks Went Out To Play.*

- **Away We Ride** (SoftTouch/kidTECH; Mac or Win)

Use the "Just For Fun" (cause and effect) option to interact with six different songs about transportation: *Down By the Station, Row, Row, Row Your Boat*, etc.

- **My Paint Program** (SoftTouch/kidTECH; Mac or Win)

Several activities for painting pictures. Begin by hitting the switch to paint the picture or select own colors and fill it in.

Laureate
110 East Spring St.
Winooski, VT 05404
(802) 655-4755

- **The Creature Games** (Mac, DOS and Mac/Win CD)

Creature Capers
Creature Features
Creature Antics
Creature Cartoons (Mac only)
Creature Magic
Creature Chorus

Linda J. Burkhart
6201 Candle Ct.
Eldersburg MD 21784
(410) 795-4561

http://lburkhart.com/

- **Early Play** (Mac) - includes levels of IntelliKeys overlays
  - Balloons
  - Clay
  - Blocks
- **Early Play & Songs** (Mac)- includes levels of IntelliKeys overlays
  - Spider Song
  - Five in a Bed
  - Big/Small/Fast/Slow

RJ Cooper & Associates
24843 Del Prado #283
Dana Point, CA 92629
(949) 661-6904

- **Build-a-Scene**
- **Early and Advanced switch Games**
- **Point to Pictures** (demo at http://www.rjcooper.com/page5.htm#ptp)

The Elaine Clark Center
5130 Peachtree Industrial Blvd.
Chamblee, GA 30341
(770) 458-3251

IntelliTools
55 Leveroni Court
Novato, CA 94949
(800) 899-6687

(These programs can be purchased through either source)

- **Baby Bear Series** (Mac)

Baby Bear's Bubble Bath: Enjoy a bath with Baby Bear as he pops bubbles, plays with a rubber ducky and snuggles in his warm towel when he's done.

Baby Bear Goes to School: Sperd a day a school with Baby Bear while he and his friends enjoy sand play, fingerpainting, and switch toys.

Baby Bear Plays Outside: Join Baby Bear and his friends on the swing, playing ball and going down the slide.

- Nursery Series (Mac)

Over in the Meadow: Sing along with this favorite nursery rhyme.

Farm Animal Sounds: Pick an animal and practice the sounds it makes.

I Feel Happy: Presents the concepts included in the favorite song.

PUBLIC DOMAIN/SHAREWARE

These public domain or shareware programs are available at low or no cost. Many can be purchased from M&M Software or downloaded from the Internet at no cost or as demos to be tried before you purchase.

M&M Software
PO Box 15769
Long Beach, CA 90815
(800) 642-6163

Public Domain (Mac)

- Color Fun (M&M Software)
- Baby Smash (M&M, Totware, Children's Software)
- Key Whack (M&M, Totware, Children's Software)
- Baby Time (M&M, Children's Software)
- My First Computer Book of Animals, Sounds, Faces (Children's Software)

Public Domain (IBM)

- Preschool Pack (M&M)
- BabyToons (http://www.babytoons.com/)
- John's Animated Computer (M&M)
- Baby Games: Dany & Raina (M&M)
- Talking Teacher Banger (Totware)
- Balloons (Children's Software)
- Danny's First Program (Children's Software)
- My First Computer Book of Animals (Kids Domain),
- Faces, Sounds(Children's Software)

Internet Sites for Downloading Software:

Totware: (shareware- better for Mac)
http://www.het.brown.edu/people/mende/totware.html

Kids Domain Software Download (Best for Windows)
http://www.kidsdomain.com/down/index.html

Totlinks: (stories, etc.)

http://kwebdesign.com/kdesk/totlinks.html

Little Fingers (shareware for kids 2-7)
http://www.littlefingers.com/software/software27.html

IntelliTools Activity Exchange: http://www.intellitools.com/exchange/
Look here for Mac and PC activities to download. Check IntelliPics, Birth to Five and then click on the Title to preview the activity before you download.

COMMERCIAL PROGRAM RESOURCES

Instead of "any key" or a mouse "click", you can use a switch with an interface or other input alternatives.

Children's Commercial Software review:
http://www.geocities.com/~reviewcorner/reviews.html

Talking Storybooks:

- **Just Grandma and Me** (Broderbund; Mac/Win CD)

Mercer Mayer's Little Critter takes his Grandma to the beach. While there, they enjoy a series of adventures. A single key will turn the page, while clicking on "hot spots" make the various pages come alive. Options include french, spanish and german versions.

- **Just Me and My Dad** (Broderbund; Mac/Win CD)

Little Critter takes his dad on a camping trip where they experience sights, sounds and adventure. Twelve pages of new "hot spots" provide hours of interactive fun. Includes a "video" page of their trip.

- **Dr. Seuss' ABC's** (Broderbund; Mac/Win CD)

Each page in the book features a letter of the alphabet. Items that begin with that letter can be clicked on for animation. The story is read out loud.

Software Programs

- **Baby WOW** (BowWow House; Mac/Win CD)

This program presents photographs of people and objects for a child to interact with. The press of any key (or switch or click) results in a variety of actions and sounds.

- **Baby Rom** (American Baby; Mac/Win CD)

This program designed for young children provides ways to explore using any key. Activities include letters, colors and body parts; video clips of children are included.

- **Jump Start Babies** (Knowledge Adventure; Mac/Win CD)

This program is designed for babies (9 to 24 months) and parents to explore the computer together. Any key or mouse click controls the eight different animated programs.

- **Jump Start Toddlers** (Knowledge Adventure; Mac/Win CD)

This computer discovery program includes animated graphics and music designed for curious toddlers. Early mouse skills are introduced which makes it very appropriate for the Touch Window.

- **Reader Rabbit Playtime for Baby** (The Learning Company; Mac/Win CD)

Any key or mouse click makes something happen on the screen.

- **Reader Rabbit's Toddler** (The Learning Company; Mac/Win CD)

Young children simply move the mouse around the screen or press a key to play one of the eight activities. The activities include exploring animal babies, bubbles, coloring and songs. (Program can be personalized.)

- **Ready for School Toddler** (Fisher-Price-Davidson; Mac/Win CD)

The "Little People" introduce the computer to very young children who can use either the keyboard or the mouse to interact with the various programs. Using a discovery approach, 20 activities that incorporate color, sound and animation are presented. Two adjustable skill levels ($1\frac{1}{2}$ - 2 years and 2-3) keep pace with the toddlers growing abilities. Use a microphone to customize some activities.

- **Discovery Farm** (Fisher-Price-Davidson; Mac/Win CD)

Discovering animals on a farm is done with the press of any key or mouse click. Familiar animals are presented similar to the animal figures from the Fisher Price Farm toy set. A second level provides for more control as the child learns to point to a picture on the screen for a specific result.

- **McGee Series** (Lawrence Productions; Mac or IBM)

Young children touch one of the four pictures on the bottom of the screen to control features of this program. They can explore McGee's House, Katie's Farm and the Fun Fair in the Park.

- **My Very First Software** (T/Maker; IBM)

Guides the child through activities designed to discover and explore the computer with a sequence of mouse and keyboard skills.

Computer Peripherals for Young Children

Switches & Switch Interfaces

Discover: Switch
Don Johnston, Inc.
26799 W. Commerce Dr.
Volo, IL 60073
(800) 999-4660

Switches
Computer Interface
Enabling Devices
385 Warburton Ave.
Hudson on Hudson, NY 10706
(800) 234-6006

Symbi-Key
Switches
Ablenet, Inc.
1081 Tenth Avenue, S.E.
Minneapolis, MN 55414
(800) 322-0956

Baby Buttons (Mac or PC)
R.J. Cooper & Associates
24843 Del Prado #283
Dana Point, CA 92629
949-661-6904

Switch Adapted Mouse (SAM)
R.J. Cooper & Associates
24843 Del Prado #283
Dana Point, CA 92629
949-661-6904

Pointing Devices

Biggy (pointer enlarger)
RJ Cooper & Associates
24843 Del Prado #283
Dana Point, CA 92629
(949) 661-6904

Magic Touch Screen
KEYTEC, Inc.
1293 North Plano Rd.
Richardson, TX 75081
(800) MAGIC-89

TouchWindow
Edmark Corporation
P.O. Box 3903
Bellevue, WA 98009
(800) 426-0856

Computer Crayon
Trackball
Turbo Mouse (Kensington)
Educational Resources
1550 Executive Dr.
Elgin, IL 60123
(800) 624-2926

Easy Ball
Microsoft Corporation
One Microsoft Way
Redmond, WA 98052
(800) 227-4679

Alternate Keyboards

Comfy Keyboard
Comfy
1556 Halford Ave., Ste. 202
Santa Clara, CA 95051
(800) 992-6639

Discover: Board
Don Johnston, Inc.
1000 N. Rand Rd., Bldg. 115
P.O. Box 639
Wauconda, IL 60084
(800) 999-4660

IntelliKeys
IntelliTools, Inc.
55 Leveroni Court, Ste. 9
Novato, CA 94949
(800) 899-6687

Big Keys Plus
Greystone Digital
P.O. Box 1888
Huntersville, NC 28078
(800) 249-5397

kidBoard
KBGear's
7416 Washington Avenue South
Eden Prairie, MN 55344.
(612) 941-1905.

Little Fingers
Datadesk Technologies
10598 NE Valley Rd.
Bainbridge Island, WA 98110
(206) 842-5480

Mini and King Keyboards
TASH, Inc.
Unit 1-91 Station St.
Ajax, ON L1S 3H2
Canada
(800) 463-5685

Let's Play! Project

Center for Assistive Technology
University at Buffalo
515 Kimball Tower
Buffalo, NY 14214

Phone: (716) 829-3141
Fax: (716) 829-3217
E-Mail: Mistrett@acsu.buffalo.edu
Web: http://cosmos.ot.buffalo.edu/letsplay/